

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1. (Currently amended) A ~~user input~~ device comprising:
display apparatus configured to display an arrangement of icons, the arrangement having a first portion comprising a first plurality of icons and a second portion comprising at least one icon, wherein peripheral icons in the arrangement comprise the first plurality of icons and at least one non-peripheral icon in the arrangement comprises the at least one icon of the second portion;
~~means for producing a highlight generator for highlighting configured to highlight any one of the icons in an the arrangement of icons, the arrangement having a first portion comprising a first plurality of icons and a second portion comprising at least one icon;~~
a user input comprising a directional control ~~for user actuation~~ configured to receive directional input indicating to which icon a highlight is to be moved and an icon selection control for user actuation configured to receive icon selection input; and

a highlight and selection control means~~arranged~~ configured to change the position of the highlight from a first icon to a second icon in response to ~~user actuation of the~~ receipt of directional control input;[[,]] to select ~~an~~ the second icon of ~~the second portion of the arrangement~~ in response to ~~user actuation of the selection control~~ receipt of icon selection input when the second icon is highlighted if the second icon is a member of the second portion; and to select automatically ~~an~~ the second icon of ~~the first portion~~ in response to receipt of directional input moving the highlight to highlighting of the second icon if the second icon is a member of the first portion.

2. (Currently amended) A ~~user input~~ device as claimed in claim 1, wherein ~~the first portion is a peripheral portion of the arrangement and the second portion is a non-peripheral portion of the arrangement~~ the icons comprising the arrangement maintain constant relative positions during icon selection operations.

3. (Currently amended) A ~~user input~~ device as claimed in claim 1, wherein the highlight and selection control means is ~~arranged~~ configured to change the position of the highlight from one icon to another in response to each user actuation of the directional control.

4. (Currently amended) A ~~user-input~~ device as claimed in claim 1, wherein the highlight and selection control means is ~~arranged~~ configured to move the highlight, after selection of an icon, to a “home” icon of the second portion of the arrangement of icons.

5. (Currently amended) A ~~user-input~~ device as claimed in claim 1, wherein the arrangement of icons comprises an N row by M column array of icons and ~~the a~~ “home” icon is located in at least one of ~~the~~ central row(s) of the array and/or the central column(s) of the array.

6. (Currently amended) A ~~user-input~~ device as claimed in claim 1, wherein the arrangement of icons comprises an N row by M column array of icons, the directional control ~~allows~~ configured to receive directional input indicating movement of the highlight in at least one direction of four directions ~~4-way movement of the highlight, in response to a user actuation,~~ to an icon in an adjacent row but the same column or in an adjacent column but the same row, and the first plurality of icons are either in ~~the a~~ first row and last row of the array or are in ~~the a~~ first column and last column of the array.

7. (Currently amended) A ~~user-input~~ device as claimed in claim 1, wherein the arrangement comprises an N row by M column array of icons, the directional control ~~allows~~ configured to receive directional input indicating movement of the highlight in at least one direction of multiple directions ~~multi-way movement of the highlight, in~~

~~response to a user actuation~~, to an adjacent icon, and the first plurality of icons are those icons in the first and last rows of the array and those icons in the first and last columns of the array.

8. (Cancelled)

9. (Currently amended) A ~~user-input~~ device as claimed in claim [[8]] 1 further comprising means for determining from the identity of the preceding selected icon(s) of an input sequence those icons which will not be selected for the remainder of the input sequence and for removing them from the display.

10. (Currently amended) A ~~user-input~~ device as claimed in claim 1, further comprising means for selecting different alphanumeric characters associated with a particular icon in response to the repetitive selection of ~~an~~ the particular icon a different number of times.

11. (Currently amended) A ~~user-input~~ device as claimed in claim 1, wherein the arrangement of icons represents a 3 column keyboard or keyboard portion or a 3 row keyboard or keyboard portion with each icon representing a key of the keyboard or keyboard portion.

12. ~~(Currently amended) A method of user input by selecting an icon from an arrangement of icons, the arrangement having a first portion comprising a first plurality of icons and a second portion comprising at least one icon, comprising the steps of:~~

highlighting one icon at a time in an arrangement of icons, the arrangement of icons having a first portion comprising a first plurality of icons and a second portion comprising at least one icon, wherein peripheral icons in the arrangement comprise the first plurality of icons and at least one non-peripheral icon in the arrangement comprises the at least one icon of the second portion;

selecting an icon of the first portion by highlighting it the icon; and

selecting an icon of the second portion by highlighting it the icon of the second portion and then actuating an input device.

13. ~~(Currently amended) A method of user input as claimed in claim 12, wherein the first portion is a peripheral portion of the arrangement and the second portion is a non peripheral portion of the arrangement~~ icons comprising the arrangement maintain constant relative positions during icon selection operations.

14. ~~(Currently amended) A method of user input as claimed in claim 12 further comprising the step of moving the a highlight~~ used in highlighting the icons to a centrally located "home" icon after selecting an icon.

15. (Currently amended) A method ~~of user input~~ as claimed in claim 14, wherein the arrangement of icons comprises an N row by M column array of icons and the "home" icon is located in at least one of ~~the~~ central row(s) of the array and/or central column(s) of the array.

16. (Currently amended) A method as claimed in claim 12, wherein the arrangement comprises an N row by M column array of icons and the first plurality of icons are either in ~~the~~ a first row and last row of the array or are in ~~the~~ a first column and last column of the array.

17. (Currently amended) A method as claimed in claim 12, wherein the arrangement comprises an N row by M column array of icons and the first plurality of icons are those in ~~the~~ first and last rows of the array and those in ~~the~~ first and last columns of the array.

18. (Currently amended) A method as claimed in claim 12 further comprising ~~the steps of:~~

displaying the arrangement of icons on a display; and
displaying a highlight on the display to highlight an icon.

19. (Currently amended) A method as claimed in claim 18 further comprising ~~the step of~~ altering the icons displayed in dependence on the icons previously selected.

20. (Currently amended) A method as claimed in claim 12 further comprising
~~the steps of:~~

repeatedly selecting an icon a different number of times to input a different
alphanumeric character.

21. (Original) A mobile communications device comprising an input device
as claimed in claim 1.

22. (Currently amended) A ~~user input~~ device comprising:

a user input comprising a directional control ~~for user actuation~~ configured to
receive directional input and a selection control ~~for user actuation~~
configured to receive icon selection input; and

means arranged to produce a highlight for highlighting any one of the icons of an
arrangement of icons, the arrangement having a first portion comprising a
first plurality of icons and a second portion comprising at least one icon,
wherein peripheral icons in the arrangement comprise the first plurality of
icons and at least one non-peripheral icon in the arrangement comprises
the at least one icon of the second portion; ~~and arranged~~ to change the
position of the highlight in response to ~~use actuation~~ receipt of directional
input entered with the directional control, wherein the device is configured
to select a highlighted icon ~~is selected~~ without ~~user~~ actuation of the
selection control if the highlighted icon is an icon of the first portion and is

~~selected~~ to select a highlighted icon in response to ~~user actuation of~~
receipt of icon selection input entered using the selection control if the
highlighted icon is an icon of the second portion.

23. (Currently amended) A ~~user input~~ device comprising:

means for producing a highlight for highlighting any one ~~of the~~ icon[[s]] of an
arrangement of icons, wherein the arrangement of icons comprises a
plurality of peripheral icons and at least one non-peripheral icon;

a user input means for receiving directional input for moving the highlight and for
receiving icon selection input; and

a control ~~means arranged~~ configured to select an highlighted icon in response to
receipt of directional input highlighting the icon if the icon is a peripheral
icon, and to select the icon in response to icon selection input after the
icon has been highlighted if the icon is a non-peripheral icon; and to move
the highlight from one icon to another in response to ~~actuation of the user~~
~~input~~ receipt of directional input; and ~~arranged~~ to automatically move the
highlight, after selection of an icon, to a "home" icon centrally located in
the arrangement of icons.

24. (Currently amended) A ~~user input~~ device as claimed in claim 23, wherein
the "home" icon is positioned within the arrangement of icons such that the average
travelling distance of the highlight for selecting the next icon is ~~minimised~~ minimized.

25. (Currently amended) A ~~user input~~ device as claimed in claim 23 wherein the arrangement of icons comprises an N row by M column array of icons and the “home” icon is located in ~~the~~ at least one of central row(s) of the array and ~~or the~~ central column(s) of the array.

26. (Currently amended) A ~~user input~~ device as claimed in claim 23 wherein the control means is arranged to select first ones of the arrangement of icons automatically when they are highlighted.

27. (Currently amended) A ~~user input~~ device as claimed in claim 23 wherein ~~the control means is arranged to select highlighted icons in response to user actuation of the user input~~ the icons of the arrangement maintain constant relative positions during icon selection operations.

28. (Currently amended) A method ~~of user input by selecting an icon from an arrangement of icons~~, comprising the steps of:

displaying an arrangement of icons, the arrangement having a first portion comprising a first plurality of icons and a second portion comprising at least one icon, wherein the icons comprising the arrangement maintain constant relative positions during icon selection operations;
generating a highlight for use in highlighting one icon at a time in the arrangement of icons;

receiving at least one of directional input indicating to which icon the highlight is
to be moved and icon selection input; and
selecting a highlighted an icon in response to highlighting of the icon if the icon is
a member of the first portion and in response to receipt of icon selection
input entered after the icon has been highlighted if the icon is a member of
the second portion. and then moving the highlight to a “home” icon.

29. (Currently amended) A user-input device comprising:
a display;
means for producing an arrangement of icons on the display;
a control input configured to receive user input; and
a control means arranged configured to select an icon in response to the user input
and arranged to change move the arrangement of icons in response to the user input,
wherein as the arrangement of icons moves, the icons comprising the arrangement
maintain constant relative positions for so long as the icons comprising the arrangement
continue to be displayed.

30. (Currently amended) A ~~user-input~~ device as claimed in claim 29, wherein
the control means is arranged to scroll an arrangement of icons across the display in
response to the user input.

31. (Currently amended) A ~~user-input~~ device as claimed in claim 29 wherein the arrangement of icons is a typist keyboard of a portion of a typist keyboard.

32. (Currently amended) A ~~user-input~~ device as claimed in claim 29 further comprising means for producing a highlight for highlighting any one of the icons in the displayed arrangement of icons wherein the control means is arranged to change the position of the highlight in response to the user input ~~and wherein changing the displayed arrangement of icons is achieved by moving the highlight to a predetermined position.~~

33. (New) A memory storing a program, the program executable by digital processing apparatus to perform operations to control a user interface, the operations comprising:

displaying an arrangement of icons in a graphical user interface, the arrangement having a first portion comprising a first plurality of icons and a second portion comprising at least one icon, wherein peripheral icons in the arrangement comprise the first plurality of icons and at least one non-peripheral icon in the arrangement comprises the at least one icon of the second portion;

generating a highlight to be used to highlight any one of the icons in the arrangement of icons;

receiving control input comprising at least one of directional input indicating to which icon the highlight is to be moved and icon selection input;

moving the highlight in response to the directional input from a first icon to a second icon; and

selecting the second icon in response to receipt of icon selection input entered after the second icon has been highlighted if the second icon is a member of the second portion and in response to receipt of directional input moving the highlight to the second icon if the second icon is a member of the first portion.

34. (New) A user interface comprising:

means for generating an arrangement of icons, the arrangement having a first portion comprising a first plurality of icons and a second portion comprising at least one icon, wherein peripheral icons in the arrangement comprise the first plurality of icons and at least one non-peripheral icon in the arrangement comprises the at least one icon of the second portion;

means for generating a highlight to be used to highlight any one of the icons in the arrangement of icons;

means for receiving control input comprising directional input indicating to which icon the highlight is to be moved and icon selection input;

means for moving the highlight in response to the directional input from a first icon to a second icon; and

means for selecting the second icon in response to receipt of icon selection input entered after the second icon has been highlighted if the second icon is a

member of the second portion and in response to receipt of directional input moving the highlight to the second icon if the second icon is a member of the first portion.

35. (New) A device comprising:

display apparatus configured to display an arrangement of icons, the arrangement having a first portion comprising a first plurality of icons and a second portion comprising at least one icon, wherein the icons comprising the arrangement maintain constant relative positions during icon selection operations while the icons are displayed;

a highlight generator configured to produce a highlight for highlighting any one of the icons in the arrangement of icons;

a user input comprising a directional control configured to receive directional input indicating to which icon a highlight is to be moved and an icon selection control configured to receive icon selection input; and

a highlight and selection control configured to change the position of the highlight from a first icon to a second icon in response to receipt of directional input; to select the second icon in response to receipt of icon selection input when the second icon is highlighted if the second icon is a member of the second portion; and to select automatically the second icon in response to receipt of directional input moving the highlight to the second icon if the second icon is a member of the first portion.

36. (New) A device as in claim 35 where the display apparatus is further configured to move the arrangement of icons in dependence on which icon is selected, wherein when moving the arrangement the icons comprising the arrangement maintain constant relative positions while the icons comprising the arrangement are displayed.

37. (New) A device as in claim 36 wherein when a particular icon is selected, the display apparatus is further configured to discontinue displaying certain icons; to continue displaying other icons; and to display further icons that were not displayed prior to selection of the particular icons, where in continuing to display the other icons, the display apparatus maintains the other icons in constant relative positions.